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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,470	09/20/2001	Richard Francis Russell	2001-0157.02	1706

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EXAMINER

REFAI, RAMSEY

ART UNIT

PAPER NUMBER

2152

DATE MAILED: 10/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,470

Applicant(s)

RUSSELL ET AL.

Examiner

Ramsey Refai

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Responsive to Amendment received on August 11, 2005. Claim 8 has been amended. Claims 1-12 remain pending further examination.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy et al (U.S. Patent No. 6,496,859) in view of White et al (6,301,012).

3. As per claim 1, Roy et al teach a method comprising the steps of:
providing a network (**Figure 1 and column 3, lines 27-37**);
communicatively coupling said computer workstation to said network (**Figure 1 and column 3, lines 27-37**);
communicatively coupling at least one printer to said network (**Figures 5A-5B**);
said computer workstation performing the steps of:
transmitting a discovery packet to which a first printer of a designated type can respond (**column 3, lines 27-50 and column 2, lines 31-51**);
receiving a response packet from said first printer, said response packet including

printer-specific network information of said first printer (**column 2, lines 14-51 and Figure 4**).

4. Roy et al fails to teach identifying whether a network port exists for said first printer and if no such network port exists, then creating a first network printer port for said first printer based on said printer-specific network information for said first printer.

5. However, White et al teach receiving identification data for identifying a peripheral device, and if the peripheral device is a new device on the network, automatically creating communication port (**abstract, column 2, lines 11-28, Figure 3, and column 4, lines 17-27**). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Roy et al and White because White's use of creating a port for newly identified devices in Roy et al's method would allow a user to send a discovery packet to discover network printers and once a response with printer-specific network information is received, a port is automatically created so that a user can use the new network printer.

6. As per claims 6, and 9, Roy et al teach printer-specific network information includes a TCP/IP address and a MAC address (**column 2, lines 8-11 and column 8, lines 7-10**).

7. As per claim 7, Roy et al teach a discovery packet is a propriety broadcast message to which only a printer of said designated type on said network will respond (**column 2, lines 31-43**).

8. As per claim 8, this claim contains similar limitations as claim 1 above, therefore is rejected under the same rationale.

9. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roy et al (U.S. Patent No. 6,496,859) in view of White et al (6,301,012) and in further in view of Brockway et al (U.S. Patent No. 6,789,111).

10. As per claim 2, Roy et al fail to explicitly teach initializing a port monitor upon a loading of said print subsystem, said port monitor performing each of said transmitting step, said receiving step and said identifying step.

11. However, Brockway et al teach a Plug and Play subsystem on a client computer that monitors ports, detects the presence of peripheral devices, notify the computer when new device are connected to the system, identify the peripheral devices, and configure the computer to operate in conjunction with the peripheral device (**column 5, lines 62-column 6, lines 25**). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Roy et al, White et al, and Brockway et al because Brockway et al's use of a Plug and Play subsystem in Roy et al and White et al's method would allow a client computer to discover new devices, such as printers, by monitoring ports, and if no port for the device is available, create a port to allow a user to communicate with the newly discovered device.

12. As per claim 3, Roy et al teach an operating system is a WINDOWS operating system **(column 6, line 15-18).**

13. As per claim 4, Roy et al fail to explicitly teach a WINDOWS operating system includes a print spooler for initializing said port monitor and for performing said creating step.

14. However, Brockway et al teach a Plug and Play subsystem, on a client computer using a WINDOWS 2000 operating system **(column 4, lines 45-50; it is known in the art that WINDOWS 2000 contains a printer spooler)**, that monitors ports, detects the presence of peripheral devices, notifies the computer when new device are connected to the system, installs drivers, identifies devices and network information, and configures the computer to operate in conjunction with the peripheral device **(column 5, lines 62-column 6, lines 25)**. It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Roy et al, White et al, and Brockway et al because Brockway et al's use of a Plug and Play subsystem in Roy et al and White et al's method would allow a client computer to discover new devices, such as printers, by monitoring ports, and if no port for the device is available, create a port to allow a user to communicate with the newly discovered device.

15. As per claim 5, Roy et al fail to teach said print spooler receives said printer-specific network information for said first printer from said port monitor.

16. However, Brockway et al teach a Plug and Play subsystem, on a client computer using a WINDOWS 2000 operating system **(column 4, lines 45-50; it is known in the art that**

WINDOWS 2000 contains a printer spooler), that monitors ports, detects the presence of peripheral devices, notifies the computer when new device are connected to the system, installs drivers, identifies devices and network information, and configures the computer to operate in conjunction with the peripheral device (**column 5, lines 62-column 6, lines 25; print spooler would obtain device information from the port monitor (Plug and Play system))** It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Roy et al, White et al, and Brockway et al because Brockway et al's use of a Plug and Play subsystem in Roy et al and White et al's method would allow a client computer to discover new devices, such as printers, by monitoring ports, and if no port for the device is available, create a port to allow a user to communicate with the newly discovered device.

17. Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable by Brockway et al (U.S. Patent No. 6,789,111) in view of Roy et al (U.S. Patent No. 6,496,859) and in further view of White et al (U.S. Patent No. 6,301,012).

18. As per claim 10, Brockway et al teach a method for automatically creating a network printer port on a workstation connected to a network, comprising the steps of:

providing a Windows operating system at said workstation (**column 4, lines 45-50**), said Windows operating system including a print subsystem (**column 5, lines 10-35 and column 5, line 62-column 6, line12; plug and play subsystem**);

providing a Windows print spooler at said workstation having an Add Port mechanism **column 5, lines 10-35, column 4, lines 51-62, column 5, line 62-column 6, line12; it is known in the art that WINDOWS 2000 operating system contains a printer spooler**);

providing a port monitor at said workstation; invoking said Windows print spooler to initialize said port monitor peripheral device (**column 5, lines 62-column 6, lines 25; print spooler would obtain device information from the port monitor (Plug and Play system)**)).

19. Brockway et al fail to explicitly teach sending a proprietary broadcast message to which each printer of a designated type on said network can respond, said each printer of said designated type responding to said proprietary broadcast message with a unique data packet including printer-specific network information; said port monitor receiving said printer-specific information; and for each identified printer of said designated type for which no port exists, said port monitor invoking a said Add Port mechanism of said Windows print spooler and thereafter, said port monitor passing said printer-specific network information to said Windows print spooler for creation of said network printer port on said workstation.

20. However, Roy et al teach transmitting a discovery packet to which a first printer of a designated type can respond (**column 3, lines 27-50 and column 2, lines 31-51**); receiving a response packet from said first printer, said response packet including printer-specific network information of said first printer (**column 2, lines 14-51 and Figure 4**).

21. Roy et al fail to teach identifying whether a network port exists for said first printer and if no such network port exists, then creating a first network printer port for said first printer based on said printer-specific network information for said first printer.

22. However, White et al teach receiving identification data for identifying a peripheral device, and if the peripheral device is a new device on the network, automatically creating communication port (**abstract, column 2, lines 11-28, Figure 3, and column 4, lines 17-27**). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's

invention to combine the teachings of Brockway et al, Roy et al, and White et al because doing so would allow a client's computer to discover new devices, such as printers, by monitoring ports, and if no port for the device is available, create a port to allow a user to communicate with the newly discovered device.

23. As per claim 11, Brockway et al fail to teach printer-specific network information includes a TCP/IP address and a MAC address.

24. However, Roy et al teach printer-specific network information includes a TCP/IP address and a MAC address (**column 2, lines 8-11 and column 8, lines 7-10**). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Brockway et al, Roy et al, and White et al because doing so would allow a client's computer to discover new devices, such as printers, by sending discover packets, and obtaining a response that contains identification of a device, such as a printer's MAC and/or IP address. Then monitoring ports, and if no port for the device is available, creates a port to allow a user to communicate with the newly discovered device.

25. As per claim 12, Brockway et al teach the step of invoking said WINDOWS print spooler to initialize said port monitor occurs when said print subsystem is loaded by said workstation (**column 4, lines 45-50; it is known in the art that WINDOWS 2000 contains a printer spooler**).

Response to Arguments

26. Applicant's arguments filed August 11, 2005 have been fully considered but they are not persuasive.

- In the remarks, the Applicant argues in substance that:
 - a. in Roy et al, the HTTP server performs the discovery and not the client;
 - b. in Roy et al, the client does not receive a response packet but rather it is the HTTP server that receives the response packet; the client never receives the response packet from the agents but rather the client receives the contents from the HTML buffer;
 - c. White et al does not teach the limitation “if no such network port exists”;
 - d. Roy et al does not teach that the discovery packet is a propriety broadcast message to which *only a printer of said designated type* on said network will respond;
 - e. there is no suggestion to combine Brockway et al with Roy et al;
- In response to argument:
 - a. Examiner respectfully disagrees. Roy et al teach that an HTTP client sends a device discovery request to an HTTP server that spawns a device discovery task by broadcasting discovery packets. Although, in this embodiment, the HTTP client does not directly send the discovery packets to the devices, the HTTP client is transmitting the request to initiate device discovery, therefore is discovering devices on the network. Furthermore, the claim language does not state that the client *performs the discovery*, but states that the client transmits “...a discovery packet to which a first printer of a designated type can respond”. According to MPEP Chapter 2111, claims must be given their broadest reasonable interpretation. In Roy et al, the HTTP client sends a device

discovery packet to which a device can respond. Although, the packet is not directly sent to the device but rather is sent to an HTTP server, which then transmits discovery packets to the devices, Roy et al's teaching meets the scope of the claimed limitation. (See **Figure 1, column 3, line 25-column 5, line 60**).

Also, in another embodiment, Roy et al teach that a client **directly** sends the discovery packets to devices and receives **responses directly** from these discovered devices without the use of an HTTP server. Therefore this embodiment also meets the scope of the claimed limitation. (See **Figures 5A, 5B, column 5, line 60-column 6, line 22**).

b. Examiner respectfully disagrees. Although, in one embodiment, Roy et al teach that the responses are not directly received from the devices but instead are sent to an HTTP server which generates an HTTP buffer from the information collected and presents this data to the client, the client is still receiving responses to discovery packets and therefore meets the scope of the claimed invention. (See **Figure 1, column 3, line 25-column 5, line 60**) Also, in another embodiment, Roy et al teach that a client **directly** sends the discovery packets to devices and receives **responses directly** from these discovered devices without the use of an HTTP server. Therefore this embodiment also meets the scope of the claimed limitation. (See **Figures 5A, 5B, column 5, line 60-column 6, line 22**).

c. Examiner respectfully disagrees. White et al teach receiving identification data for identifying a peripheral device, and if the peripheral device is a new device on the network, automatically creating communication port. Although White fails to explicitly recite the limitation "if no such port exists", the system does determine if the device is

new by verifying that an entry for the printer is not stored, therefore White meets the scope of the claimed limitation. (See column 3, line 45-57, abstract, column 2, lines 11-28, Figure 3, and column 4, lines 17-27).

d. Examiner respectfully disagrees. Roy et al teach that an HTTP client can send a request to either discover all packets on a network or those of a specified class, such as a certain brand of printers. Therefore Roy et al meets the scope of the claimed limitation. (see column 3, lines 25-37).

e. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, both Roy et al and Brockway et al deal with discovery of network devices such as printers. Roy et al teach a client can discover network devices by sending discovery packets and receiving responses from these network devices. (see column 5, line 60-column 6, line 22, Figures 5A-5B) Roy et al fail to explicitly teach a WINDOWS operating system that contains a printer spooler that receives said printer-specific network information for said first printer from said port monitor and initializing a port monitor upon a loading of said print subsystem, said port monitor performing each of said transmitting step, said receiving step and said identifying step. However, Brockway et al teach a Plug and Play subsystem,

on a client computer using a WINDOWS 2000 operating system (**column 4, lines 45-50; it is known in the art that WINDOWS 2000 contains a printer spooler**), that monitors ports, detects the presence of peripheral devices, notifies the computer when new device are connected to the system, installs drivers, identifies devices and network information, and configures the computer to operate in conjunction with the peripheral device (**column 5, lines 62-column 6, lines 25**). It would have been obvious to one of the ordinary skill in the art at the time of the applicant's invention to combine the teachings of Roy et al, White et al, and Brockway et al because Brockway et al's use of a Plug and Play subsystem in Roy et al and White et al's method would allow a client computer to discover new devices, such as printers, by monitoring ports, and if no port for the device is available, create a port to allow a user to communicate with the newly discovered device.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

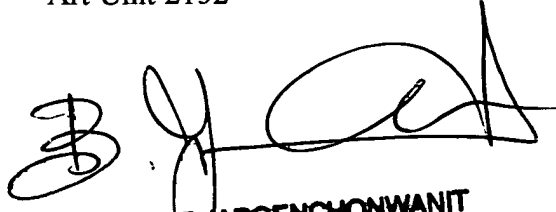
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Refai whose telephone number is (571) 272-3975. The examiner can normally be reached on M-F 8:30 - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on (571) 272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ramsey Refai
Examiner
Art Unit 2152


October 19, 2005


BUNJOB JAROENCHONWANIT
PRIMARY EXAMINER